

Comparisons of Job Characteristics

Focus Occupation: [Engineering Technicians, Except Drafters, All Other \(17-3029\)](#)

Associated Occupation: [Electrical Engineers \(17-2071\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 91

Focus Occupation: Engineering Technicians, Except Drafters, All Other (17-3029)

Associated Occupation: Electrical Engineers (17-2071)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Engineering and Technology	5.7	22.4	17.6	<<	Extensive education and/or training may be required
Design	5.2	21.5	15.1	<<	Extensive education and/or training may be required
Mathematics	9.2	18.1	16.6	0	Current knowledge level may be sufficient
Computers and Electronics	8.4	17.7	16.2	0	Current knowledge level may be sufficient
Physics	4.3	15.3	12.9	<	Expanded education and/or training may be required
Mechanical	6.8	12.9	16.6	>>	Current knowledge level is likely more than sufficient
Telecommunications	3.9	7.2	7.4	0	Current knowledge level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 59

Focus Occupation: Engineering Technicians, Except Drafters, All Other (17-3029)

Associated Occupation: Electrical Engineers (17-2071)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Writing	9.2	13.0	9.7	<<	Extensive development of skills in this area may be required
Complex Problem Solving	9.1	12.5	11.3	<	A higher skill level may be required
Mathematics	6.2	10.4	10.8	0	Current skill level may be sufficient
Operations Analysis	5.0	9.8	7.2	<<	Extensive development of skills in this area may be required
Systems Evaluation	6.4	9.8	8.5	<	A higher skill level may be required

Science	4.5	9.4	7.7	<	A higher skill level may be required
Troubleshooting	4.5	8.8	10.6	>	Skill level is likely sufficient
Technology Design	2.6	5.1	7.0	>>	Skill level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 90			
Focus Occupation: Engineering Technicians, Except Drafters, All Other (17-3029) Associated Occupation: Electrical Engineers (17-2071)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Written Comprehension	11.0	14.8	12.7	<	Some improvement in abilities may be required
Problem Sensitivity	11.1	14.0	12.6	<	Some improvement in abilities may be required
Deductive Reasoning	10.6	13.9	12.9	0	Current ability level may be sufficient
Written Expression	9.8	13.8	11.2	<	Some improvement in abilities may be required
Inductive Reasoning	10.2	13.5	12.0	<	Some improvement in abilities may be required
Information Ordering	9.9	12.3	12.0	0	Current ability level may be sufficient
Category Flexibility	9.0	11.4	11.0	0	Current ability level may be sufficient
Mathematical Reasoning	6.3	10.4	11.2	0	Current ability level may be sufficient
Number Facility	6.3	10.1	10.2	0	Current ability level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

There are no common work activities.

Tools and Technologies that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 79
Focus Occupation: Engineering Technicians, Except Drafters, All Other (17-3029) Associated Occupation: Electrical Engineers (17-2071)		
Tools and Technologies	Exclusivity	
Business function specific software	1	
Computer printers	2	
Computers	1	
Content authoring and editing software	1	
Development software	4	
Electrical measuring and testing equipment	7	
Electronic and communication measuring and testing instruments	14	
Electronic manufacturing and processing machinery	56	
Indicating and recording instruments	2	

Industry specific software	1
Integrated circuits	18
Laboratory decanting and distilling and evaporating and extracting equipment and supplies	19
Laboratory electron and solid state physics equipment	29
Laboratory environmental conditioning equipment	24
Laboratory furnaces and accessories	26
Laboratory heating and drying equipment	13
Laboratory implements	27
Length and thickness and distance measuring instruments	2
Light and wave generating and measuring equipment	4
Mechanical instruments	14
Networking software	21
Operating environment software	12
Power conditioning equipment	33
Spectroscopic equipment	10
Temperature and heat measuring instruments	6
Viewing and observing instruments and accessories	4
Weight measuring instruments	7

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.